



SHARP News



HIV is (still) Not Transmitted by Mosquitoes

In *A Tri-service study of HIV Education and Prevention Needs in the Military*¹, researchers, who surveyed over 5,000 active duty members, found that nearly 90% or more of the people they surveyed could correctly respond to statements about HIV. However, between "30 and 40% of personnel in all services **did not know whether people can get AIDS from mosquitoes**". Of course, mosquitoes do not transmit HIV to people. One way of communicating this information to our Sailors and Marines is to use the detailed answer to the question "Can I get AIDS from a mosquito or any other insect" from the **American Red Cross HIV-AIDS Facts Book**²:

"As of December 1997, there were no documented cases of the virus being spread by an insect. Most cases of HIV, including AIDS, are found in men and women between the ages of 20 and 50. However, mosquitoes and insects attack people of all ages, including older people and school-age children. If mosquitoes or other insects could spread HIV, a larger number of older people and young children would have become infected. This did not happen in Belle Glade Florida, where researchers studied the question of HIV transmission by mosquitoes, nor has it happened elsewhere.

Also, how would a mosquito infect someone? It would first have to bite an infected person. Then the mosquito would have to do one of two things:

- Immediately travel to someone else and infect that person from tiny drops of infected blood left on the sucker.
- Process the virus in its saliva and inject it into the next person.

Mosquitoes do not do either of these things. They do not travel from one person to the next. They do not carry enough blood on their suckers to infect anyone else they bite. And they do not process the virus in their saliva. Once inside a mosquito, the virus lives for only a short time. Thus, the saliva mosquitoes inject into people cannot have HIV. Bites from mosquitoes and other sucking insects do not spread HIV"

We can also use the *SHARP Facts* sheet on "HIV Frequently Asked Questions"³:

"**Can I get infected HIV from mosquitoes?** No. Since the beginning of the HIV epidemic there has been concern about transmission of HIV by biting and bloodsucking insects, such as mosquitoes. However, studies conducted by the CDC and elsewhere have shown no evidence of HIV transmission through mosquitoes or any other insects -- even in areas where there are many cases of AIDS and large populations of mosquitoes. Lack of such outbreaks, despite intense efforts to detect them, supports the conclusion that HIV is not transmitted by insects.

When an insect bites a person, it does not inject its own or a previously bitten person's or animal's blood into the next person bitten. Rather, it injects saliva, which acts as a lubricant so the insect can feed efficiently. Diseases such as yellow fever and malaria are transmitted through the saliva of specific species of mosquitoes. However, HIV lives for only a short time inside an insect and, unlike organisms that are transmitted via insect bites, HIV does not reproduce (and does not survive) in insects. Thus, even if the virus enters a mosquito or another insect, the insect does not become infected and cannot transmit HIV to the next human it bites."

Let's help our Sailors and Marines understand the facts about HIV transmission.

1 - Executive Summary, *A Tri-service study of HIV Education and Prevention Needs in the Military*, 28 January 2000, Center for Health Policy Studies, Columbia, MD, p4

2 - American Red Cross *HIV-AIDS Facts Book*, Rev. June 1998, p64

3 - download **SHARP Facts** from: <http://www-nehc.med.navy.mil/hp/sharp/resources/shrpftc.htm>